

MSC GAME PROGRAMMING

Dear

Welcome to MSc Game Programming at Falmouth University

You are about to embark on an intellectually stimulating journey to become a successful game programming professional. We have worked with games industry veterans, pioneering game educators, and world-leading researchers to prepare a rigorous and comprehensive curriculum for you. The course is skills-orientated and tailored to maximise your employability; whether this will be at a AAA games studio, an established indie developer, your own start-up company, or as a freelance content creator.

We're getting in touch with some important information about your course that will help you as you prepare to join us.

At the end of this letter, you will find a list of equipment that you should bring with you, as well as any other costs that you might incur throughout your course that are not covered by your student loan.

We've also included some activities that we suggest you undertake, to help you prepare for your studies.

We've also included some suggested reading. You will have access to all the reading resources from the library when you arrive on campus, but if you're looking forward to diving in, this is a good place to start.

Your academic experience will be predominantly in person with some courses using some digital resources to support your learning. To engage in the digital learning activity, although you will be able to access IT suites on campus, you may find it beneficial to have a laptop to access the platforms and tools we use. You will be provided with free access to the Microsoft Office suite, (including Word, Excel and PowerPoint) while you study at Falmouth.

If you are eligible for a loan from Student Finance and have not yet applied, please do so immediately to ensure the loan is approved before you enrol. Once you enrol you are liable for the tuition fees. You can find more information from the Student Loans Company at: [gov.uk/government/organisations/student-loans-company](https://www.gov.uk/government/organisations/student-loans-company) If you are paying for your tuition yourself please check out falmouth.ac.uk/study/tuition-fees. Advice on managing your finances while studying can be found on the University's website here: falmouth.ac.uk/study/student-funding/how-much-does-it-cost

In the coming weeks, you can join our Step into Falmouth programme, designed to provide advice and guidance to help you to settle into university life. This programme includes a range of informative and supportive videos you can view at a time that suits you, followed by live online events in August where you can meet our staff, current and new students. More information can be found at falmouth.ac.uk/experience/new-students/step-into-falmouth

FALMOUTH UNIVERSITY

Over the next few weeks, we'll email you more important information about your course and life at Falmouth. If you're going to be away or out of contact, make sure you ask someone to check your emails and reply on your behalf.

We know there is a lot to think about before you start postgraduate study at university. So, we're here to help. If you have any questions, just get in touch with Applicant Services on +44(0)1326 213730, use LiveChat on our website or email applicantsservices@falmouth.ac.uk

Finally, we wish you an enjoyable few weeks before the start of term and we're looking forward to welcoming you to Falmouth in September.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'M Scott', with a long horizontal stroke extending to the right.

Dr Michael Scott

Associate Professor & Head of Computing
michael.scott@falmouth.ac.uk

Getting started

Your offer

If you have a conditional offer, your place is subject to meeting those conditions. This means we're waiting to receive your results or some more information before your place can be finalised. You can see these conditions using the Falmouth [Applicant Portal](#)

If you need to ask us anything about your offer, get in touch with our Applicant Services team on +44(0)1326 213730, use LiveChat on our website or email applicantsservices@falmouth.ac.uk

Enrolment and Student Terms & Conditions

You'll get an email two weeks before the start of term telling you how to enrol online. You'll need to enrol before the first day of term to officially register as a student of Falmouth University and receive your undergraduate student loan.

When you enrol, you'll need to agree to and comply with the University's Student Terms & Conditions. These Terms & Conditions are important, and we encourage you to read them carefully, before enrolling. You can find them under 'Student Terms & Conditions' on our website www.falmouth.ac.uk/student-regulations

Tuition fees (per year)

2024-2025 full-time UK: £10,200

2024-2025 full-time International: £19,950

Term dates

Term dates can be found at falmouth.ac.uk/experience/term-dates/term-dates-2024-25
Study Block 1 starts on Monday 23 September for postgraduate students.

Your timetable

Your academic timetable shows all scheduled learning activities and your course timetable. It will be available from 9 September. After you've enrolled, you can view it via the Student Portal at falmouth.myday.cloud/ or the Falmouth University App. You can download the app by searching the Google Play Store or Apple Store. It will also be accessible at mytimetable.falmouth.ac.uk.

After you have enrolled, your timetable will show you where you need to go and when on Monday 23 September and throughout the week.

Student Support

We know the prospect of starting postgraduate study can feel overwhelming, but we're here to support you every step of the way. You can find an overview of the support available to you once you get here falmouth.ac.uk/experience/support

Pre-course Preparation

The course will primarily focus on developing your practical problem-solving and programming skills, alongside fundamental knowledge of agile project management, computer science, mathematics, and game engine architecture.

There will be considerable emphasis on the challenges and opportunities presented by game programming in the context of multidisciplinary studio-based development of digital games. It is anticipated that you are a confident programmer, or willing to rapidly upskill, and so the course will immediately focus on practical development skills and the implementation of relevant programming techniques.

However, you may not have used the programming languages and tools that are typically used in the games industry. As such, you are encouraged to familiarise yourself with C++ alongside several frameworks and engines prior to your arrival.

Some free online resources are:

C++: www.learncpp.com
SDL: <https://lazyfoo.net/tutorials/SDL/>
OpenGL: <https://lazyfoo.net/tutorials/OpenGL/>
Unreal Engine: docs.unrealengine.com/en-us/Resources

You are also encouraged to watch:

Computing: www.youtube.com/user/computerphile
Mathematics: www.youtube.com/user/numberphile
Game Maths: www.youtube.com/user/BSVino

The best way to learn a programming language or tool is to use it to make something. Therefore, you are strongly encouraged to devise and work on a project to hone your skills prior to your arrival. A suggested first project is to re-imagine a classic 1980s arcade game and implement it in C++. While you are doing this project, you can engage with our online community. Please join our Discord channel, introduce yourself, and show us your work-in-progress: <https://link.falmouth.games/discord>

Course Equipment and Costs

Computer

You will need access to your own private personal computer to be able to put in the computer programming practice that is needed to become a computing professional.

A suitable personal computer or laptop for this course will likely cost around £1500. The latest advice about which computers we recommend you buy for your course is available here:

link.falmouth.games/computer-advice

Headset with Microphone

You will need a headset with a microphone for some classes. We recommend purchasing a high-quality headset for your comfort. Manufacturers such as Sennheiser, Razer, HyperX and Corsair are rated highly by our current students. These can cost between £30 - £150.

Webcam

You may need a webcam in some teaching. Manufacturers such as Logitech, Microsoft, and Razer are rated highly by our current students. These can cost between £25 - £100.

Internet Access

It is important that you secure sufficient access to the Internet as some materials are made available to you through our virtual learning environment. We recommend a fibre broadband connection if available, but a minimum of at least 5Mbps will be suitable for livestreaming content.

If you have further questions, need more detailed advice or would like us to check the suitability of a particular model, then please email: games.support@falmouth.ac.uk

FALMOUTH UNIVERSITY

Highly Recommended - the 'Live @ AMATA Pass'

AMATA is Falmouth University's arts centre, offering a diverse year-round programme of exciting performances and productions, from monthly comedy nights to fantastic live music, trailblazing new theatre and dance.

The programme complements our portfolio of degrees and enables students to experience high quality, contemporary performances on their doorstep.

Students can purchase a one year Live @ AMATA Pass which offers five tickets for £25. This represents a 50% reduction on our standard student ticket price of £10.

You will be able to view the programme at falmouth.ac.uk/arts-centre from August 2024. However, the Live @ AMATA Pass is available now to book at falmouth.ac.uk/arts-centre/visit/tickets#live-pass

Please note: If a parent or guardian is purchasing on behalf of a Falmouth University student, the account should be set up in the student's name, using their email address.

Reading Lists

Electronic copies of books will be significantly cheaper than physical copies. Some have been released online by authors as free PDF documents. As such, the cost of book purchases should not exceed £200 and can be significantly less.

Prior to your arrival, you should consider reading:

Dawson, M., 2015. *Beginning C++ Through Game Programming*, 4th Edition. Cengage Learning.

Gregory, J., 2018. *Game Engine Architecture*, 3rd Edition. CRC Press LLC.

Keith, C., 2010. *Agile Game Development with Scrum*. Addison-Wesley.

Since we'll be making games, understanding them can be helpful:

Suits, B., 1978. *The Grasshopper: Games, Life and Utopia*. Broadview Press.

Huizinga, J. 1949. *Homo Ludens: A Study of the Play-Element of Culture*. London: Routledge.

Salen, K. and Zimmerman, E., 2003. *Rules of play: game design fundamentals*. MIT Press.

Macklin, C. and J. Sharp. 2016. *Games, Design and Play: A Detailed Approach to Iterative Game Design*.

King, G. and Krzywinska, T., 2005. *Tomb raiders and space invaders*. IB Taurus.